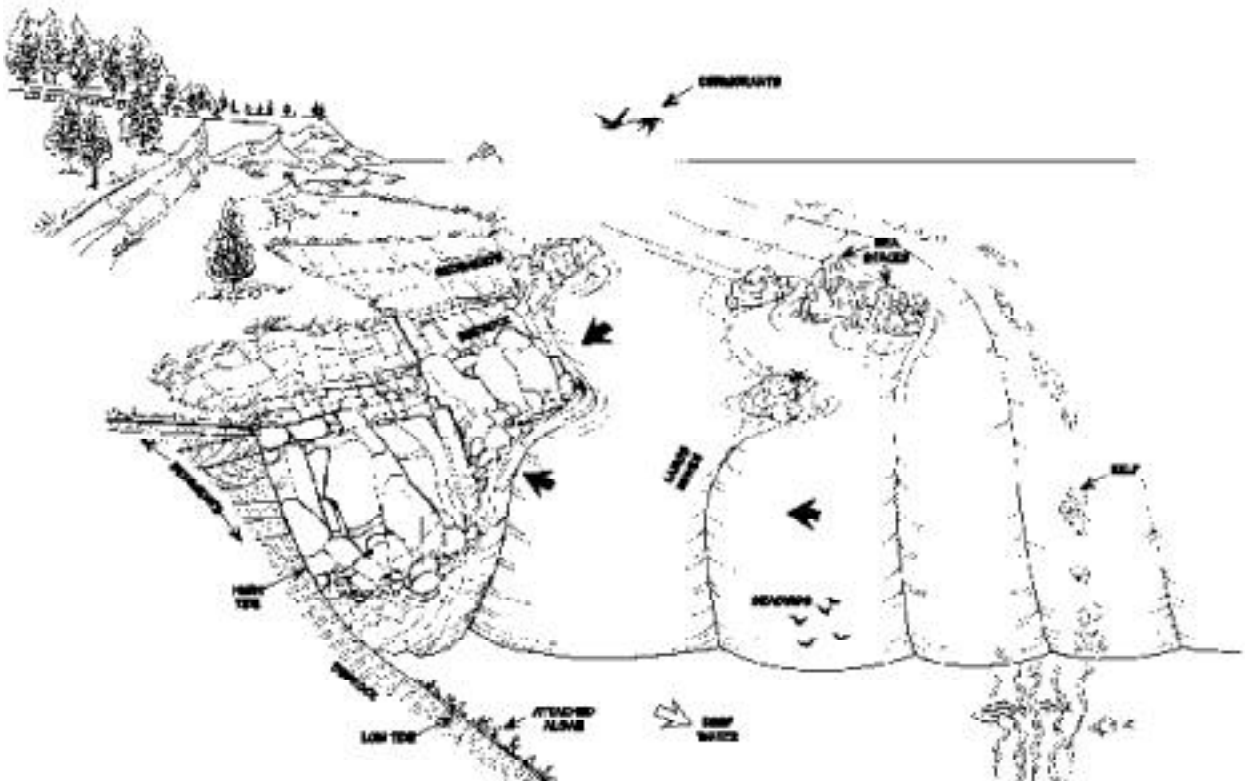

Exposed Rocky Shores

Description

- The intertidal zone is steep (>30° slope) and narrow with very little width.
- Sediment accumulations are uncommon because waves remove debris that has slumped from the eroding cliffs.
- There is strong vertical zonation of intertidal biological communities.
- Species density and diversity vary greatly, but barnacles, snails, mussels, polychaetes, and macroalgae can be abundant.

Predicted Oil Behavior

- Oil is held offshore by waves reflecting off the steep, hard surfaces.
- Any oil that is deposited is rapidly removed from exposed faces.
- The most resistant oil would remain as a patchy band at or above the high-tide line.
- Impacts to intertidal communities are expected to be short-term. An exception would be where heavy concentrations of a light refined product came ashore very quickly.

Response Considerations

- Cleanup is usually not required.
- Access can be difficult and dangerous.

Exposed Rocky Shores

Oil Category Descriptions

I – Gasoline products
II – Diesel-like products and light crudes
III – Medium grade crudes and intermediate products
IV – Heavy crudes and residual products
V – Non-floating oil products

The following categories are used to compare the relative environmental impact of each response method in the specific environment and habitat for each oil type. The codes in each table mean:

A = The least adverse habitat impact.
B = Some adverse habitat impact.
C = Significant adverse habitat impact.
D = The most adverse habitat impact.
I = Insufficient information - impact or effectiveness of the method could not be evaluated.
— = Not applicable.

Response Method	Oil Category I	II	III	IV	V
Natural Recovery	A	A	A	A	A
Barriers/Berms	–	–	–	–	–
Manual Oil Removal/Cleaning	–	–	B	B	B
Mechanical Oil Removal	–	–	–	–	–
Sorbents	–	B	A	A	A
Vacuum	–	A	A	A	A
Debris Removal	–	A	A	A	A
Sediment Reworking/Tilling	–	–	–	–	–
Vegetation Cutting/Removal	–	–	–	–	–
Flooding (deluge)	–	–	–	–	–
Low-pressure, Ambient Water Flushing	–	A	A	B	B
High-pressure, Ambient Water Flushing	–	B	B	B	B
Low-pressure, Hot Water Flushing	–	–	C	C	C
High-pressure, Hot Water Flushing	–	–	C	C	C
Steam Cleaning	–	–	D	D	D
Sand Blasting	–	–	D	D	D
Solidifiers	–	–	–	–	–
Shoreline Cleaning Agents	–	–	C	C	C
Nutrient Enrichment	–	–	–	–	–
Natural Microbe Seeding	–	–	–	–	–
In-situ Burning	–	–	–	–	–

Consult the *Environmental Considerations for Marine Oil Spill Response* document referenced on page 5 before using this table.